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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/727,262

12/03/2003

Kevin W. Glass

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07/08/2005

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EXAMINER

NGUYEN, KHANH V

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/727,262	Applicant(s) GLASS ET AL.	
	Examiner Khanh V. Nguyen	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-8,10-13,15-23 and 25-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-8,12,15,18,19,22,23 and 26 is/are rejected.
- 7) ☒ Claim(s) 10,11,13,16,17,20,21,25 and 27-29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4-7, 18, 19, 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Webb (4,855,625).

Regarding claims 4, 18, 26, Webb (Fig. 3) discloses an amplifier circuit comprising: an input transistor (Q1) and a second transistor (Q2) coupled as a Darlington pair; a bias transistor (Q3) can be read as a bias circuit which is capable of increasing collector-to-emitter bias current in the input transistor (Q1); and transistor (Q4) can be read as a cascode transistor coupled between an upper power supply (95) and collectors of the input transistor (Q1) and second transistor (Q2).

Regarding claims 5, 19, wherein current source (50) can be read as a second bias circuit which bias at the base of the cascode transistor (Q4).

Regarding claims 6, 7, wherein the bias circuit is inherently seen applying a bias voltage through input (IN) to the base of transistor (Q1) and the input transistor (Q1) is a heterojunction bipolar transistor.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 12, 15, 22, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lueng (5,548,288).

Regarding claim 1, Lueng discloses the claimed invention except utilizing bipolar transistors as a Darlington pair. Lueng (Fig. 3) discloses an input transistor (MN1) and a second transistor (MN2) coupled as a Darlington pair, wherein transistors (MN1, MN2) are field effect transistors having gate, drain and source and not bipolar transistors as claimed which have base, collector and emitter; and a transistor (QP1) together with Master Bias can be read as a bias circuit which is capable of increasing drain-to-source (collector-to-emitter if transistor is a bipolar) bias current in the input transistor (MN1),

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wherein the bias circuit comprises an operational amplifier (Amp bias) coupled to maintain a substantially constant gate voltage on the second transistor (MN2) via transistor (QP1). However, it is well known in the art that field effect transistor and bipolar transistor can be used interchangeably. As such, replacing field effect transistors of Lueng (Fig. 3) with bipolar transistors would have been obvious to one having ordinary skill in the art.

Regarding claims 12, 23, see rejected claim 1, and further comprises current source (Ibias) and transistor (MNBias) which are capable of influence the operation of the controllable bias circuit (Ampbias, QP1) can be read as claimed control circuit.

Regarding claim 15, Lueng discloses the claimed invention except a filter having the connection as claimed. However, it is well known in the art that adding such a filter will improve the stability of a circuit. As such, adding a filter as claimed to Lueng would have been obvious to one having ordinary skill in the art.

Regarding claim 22, see rejected claim 1, wherein the circuit of Lueng can be implemented in a telecommunication circuit having an antenna.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Webb.

Webb discloses the claimed invention except for the specific transistor claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized a known Indium Phosphate transistor, since applicant has not disclosed that Indium Phosphate transistor solves any state problem or is for any

particular purpose and it appears that the invention of Webb would perform equally well with claimed Indium Phosphate transistor.

### ***Allowable Subject Matter***

Claims 10, 11, 13, 16, 17, 20, 21, 25, 27-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 10, 11 call for, among others, an inductor having the connection thereof.

Claim 13 calls for, among others, a second controllable bias circuit having the connection thereof.

Claims 16, 17, 25 call for, among others, the control circuit includes a D/A converter or a processor.

Claims 20, 21 call for, among others, the control circuit and an automatic gain control circuit having the function thereof.

Claims 27-29 call for, among others, method of measuring an output voltage of the Darlington pair.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh V. Nguyen whose telephone number is (571) 272-1767. The examiner can normally be reached from 8:00 AM - 3:30 PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Khanh Van Nguyen', with a long horizontal flourish extending to the right.

**KHANH VAN NGUYEN**  
**PRIMARY EXAMINER**  
**Art Unit: 2817**